






## Biology Pacing Guide

Textbook Correlation by Chapters	Topics and Suggested Number of Days	# Days (total with review and assessment)	Essential Standards	Clarifying Objectives
 1, 2, 3, 18, 28, 30	<b>The Nature of Life</b> <ul style="list-style-type: none"> <li>• Features of Living Things (2)</li> <li>• Taxonomy; 6 Kingdoms (4)</li> <li>• Dichotomous Keys (2)</li> <li>• Introduction to the Microscope (1)</li> <li>• Pathogenic Viruses and Bacteria (3)</li> <li>• Protist Survey (2)</li> </ul>	16	3.5 Analyze how classification systems are developed based upon speciation. 3.4 Explain the theory of evolution by natural selection as a mechanism for how species change over time. 1.2 Analyze the cell as a living system.	3.5.1 3.5.2 3.4.3 1.2.3
 3-6, 18, 22-25	<b>Interactions Between Organisms and the Environment</b> <ul style="list-style-type: none"> <li>• Food Chains &amp; Food Webs (3)</li> <li>• Populations (5)</li> <li>• Biological Magnification (1)</li> <li>• Animal Behavior (3)</li> <li>• Succession (1)</li> <li>• Symbiotic Relationships (2)</li> <li>• Plants--Major groups; Angiosperm Structure &amp; Reproduction (2)</li> <li>• Plant Tropisms (1)</li> <li>• Nutrient Cycles (C and N) (2)</li> </ul>	 25	2.1 Analyze the interdependence of organisms within their environments. 2.2 Understand the impact of human activities on the environment.	2.1.1 2.1.2 2.1.3 2.1.4 2.2.1 2.2.2
7-9, 10, 18, 19, 20	<b>Cells</b> <ul style="list-style-type: none"> <li>• Chemistry of Life: Biological Compounds, pH &amp; Enzymes (4)</li> <li>• Prokaryotic vs. Eukaryotic (1)</li> <li>• Cell Structures &amp; Functions (5)</li> <li>• Cell Transport (4)</li> <li>• Energy for Cells--Photosynthesis &amp; Respiration (5)</li> <li>• Cell Cycle &amp; Mitosis (1)</li> </ul>	22 	1.1 Understand the relationship between the structures and functions of cells and their organelles. 1.2 Analyze the cell as a living system. 4.1 Understand how biological molecules are essential to the survival of living organisms. 4.2 Analyze the relationship between biochemical process and energy use in the cell.	1.1.1 1.1.2 1.1.3 1.2.1 1.2.2 1.2.3 4.1.1 4.1.2 4.1.3 4.2.1 4.2.2
 11-14	<b>Genetics</b> <ul style="list-style-type: none"> <li>• Meiosis (1)</li> <li>• Structure of Nucleic Acids (1)</li> <li>• Protein Synthesis &amp; Gene Regulation (3)</li> <li>• Electrophoresis &amp; DNA Fingerprinting (1)</li> <li>• Patterns of Inheritance (5)</li> <li>• Karyotypes &amp; Pedigrees (2)</li> <li>• Human Genetic Disorders (2)</li> </ul>	15	3.1 Explain how traits are determined by the structure and function of DNA. 3.2 Understand how the environment, and/or the interaction of alleles, influences the expression of genetic traits. 3.3 Understand the application of DNA technology. 4.1 Understand how biological molecules are essential to the survival of living organisms.	3.1.1 3.1.2 3.1.2 3.2.1 3.2.2 3.2.3 3.3.1 3.3.2 3.3.3 4.1.2
15-17, 34	<b>Evolution</b> <ul style="list-style-type: none"> <li>• Darwin's Theory of Natural Selection (2)</li> <li>• Evidence for Evolution (1)</li> <li>• Pesticide &amp; Antibiotic Resistance (1)</li> </ul>	5	3.4 Explain the theory of evolution by natural selection as a mechanism for how species change over time.	3.4.1 3.4.2 3.4.3
REVIEW	Last two days of class to be devoted to EOC review	2	ALL!	